Applicant : Henrik Arnberg Attorney's Docket No.: 15665-Serial No. : 10/599,753 0010US1 / PS53824US00

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### Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

# **Listing of Claims**:

# 1-15. (Canceled)

16. (**Currently Amended**) A method for treating a mammal suffering from a periodontal disease, comprising locally administering by injection in the proximity of the periodontal disease a therapeutically effective amount of a composition comprising a therapeutic agent, said therapeutic agent consisting of at least one granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide.

#### 17. (Canceled)

18. (**Previously Presented**) The method of claim 16, wherein the periodontal disease is gingivitis or periodontitis.

#### 19-20. (Canceled)

- 21. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection through the mucosal lining of the gingiva or by application in a periodontal pocket.
- 22. (**Previously Presented**) The method of claim 16, wherein said GM-CSF is present in the composition in a unit dosage amount of 5  $\mu$ g to 800  $\mu$ g.
- 23. (**Previously Presented**) The method of claim 22, wherein the unit dosage amount is 50  $\mu g$  to 100  $\mu g$ .

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24. **(Previously Presented)** The method of claim 16, wherein the composition is administered at intervals ranging from once a day to once every third week.

- 25. (**Previously Presented**) The method of claim 16, wherein the composition is administered a total of 1 to 3 times for a period of one week.
- 26. (**Previously Presented**) The method of claim 16, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.

#### 27-31. (Canceled)

- 32. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection into the alveolar mucosa.
- 33. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection into the sublingual mucosa.
- 34. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection into the palate part.
- 35. (Currently Amended) The method of claim 16, wherein the composition is administered by injection between the periosteum of the alveolar bone and the alveolar mucosa, and wherein a needle used for injection is inserted into a flexible oral mucosa mucosal region adjacent to the gingiva.
- 36. (Previously Presented) The method of claim 16, wherein the mammal is a human.

### 37-48. (Canceled)